NOVA Chemicals
Polyethylene

Product Data Sheet

NOVAPOL® HF-Y450-A Resin

Hexene Copolymer HDPE Film Resin

Property	ASTM (1)	Typical Values (2)	
Melt Index(3)	D 1238	0.40	g/10 min
Density	D 792	0.949	g/cm³
		METRIC UNITS	ENGLISH UNITS

Film Properties(4)

Thickness			25	µm	1.0	mil
Tear Strength	MD	D 1922	13	g		
	TD		480	g		
Dart Drop Impact, F_{50}		D 1709/A	70	g		
Low Friction Puncture(5)			57	J/mm	13	in-lb/mil
Tensile Strength	MD	D 882	35	MPa	5,100	psi
	TD		33	MPa	4,800	psi
Yield Strength	MD	D 882	22	MPa	3,200	psi
	TD		24	MPa	3,500	psi
Elongation	MD	D 882	530	%		
	TD		890	%		
1% Secant Modulus	MD	D 882	638	MPa	92,500	psi
	TD		769	MPa	111,500	psi

(1) Properties designated have been determined using methods which are in accordance with, or substantially in accordance with, the specified testing standards.
(2) Typical Values represent average laboratory values and are intended as guides only, not as specifications.
(3) Condition 190°C/2.16 kg.
(4) Film properties are typical of blown film extruded on a 1.5" extruder with 3" die and 35-mil die gap at a blow up ratio of 2.5:1, but are dependent upon operating conditions.
(5) NOVA Chemicals test method.

Melt Index	0.40
Density	0.949
Slip	None
Antiblock	None

Features

- High strength and stiffness
- Excellent drawdown
- Used in blends with LDPE/LLDPE for improved film stiffness

Additives

- Processing antioxidant

Applications

- Blown film

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Availability

NOVAPOL HF-Y450-A polyethylene resins are available in bulk hopper cars, hopper trucks, boxes, sea bulk containers, or bags. The product type and batch number are clearly marked on each container. Contact the NOVA Chemicals sales office nearest you for availability in your area.

Storage/Handling

NOVAPOL HF-Y450-A resin should be stored in a clean, dry place at ambient temperatures. Prolonged or improper storage can result in deterioration of product properties. Care should be taken when handling and transferring product to prevent foreign matter contamination. The NOVA Chemicals Safety Data Sheet (SDS) contains important safety information and should be reviewed before using the product.

Processing Conditions

Comprehensive assistance with processing conditions and technology is available from NOVA Chemicals Technical Service at (403) 291-8444.

Environmental

NOVA Chemicals polyethylene resins are biologically and chemically inert, but improper disposal may present an ingestion hazard to wildlife. Where recycling of NOVA Chemicals' polyethylene resins is not possible, disposal to landfill or incineration in accordance with all applicable government laws and regulations is recommended. Please contact NOVA Chemicals Technical Service for further information on recycling and disposal of NOVA Chemicals resins.



is the SPI resin code developed for high density polyethylene to identify material type for sorting and recycling purposes.

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